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ABSTRACT

Prepared under the direction of the Statistical Review Board, which is composed of members representing agencies of the Department of Agriculture, this handbook provides agricultural statistical information and revisions since Agriculture Handbook No. 118 was issued. Chapter 1 describes information published in "Farm Population Estimates," which contains estimates of persons living on farms and the components of farm population change, and "Current Population Reports," which presents current estimates by age, sex, color, and labor force status. Chapter 2 discusses farm employment, wage rates, and earning estimates, as reported in "Farm Labor," a monthly series estimating the total number of persons who do farm work, and in "The Hired Farm Working Force of (year)," an annual series estimating the number of persons paid to perform farmwork at any time during the year. The descriptions contain historical background, limitations of the series, definitions and concepts, and other information. (SB)

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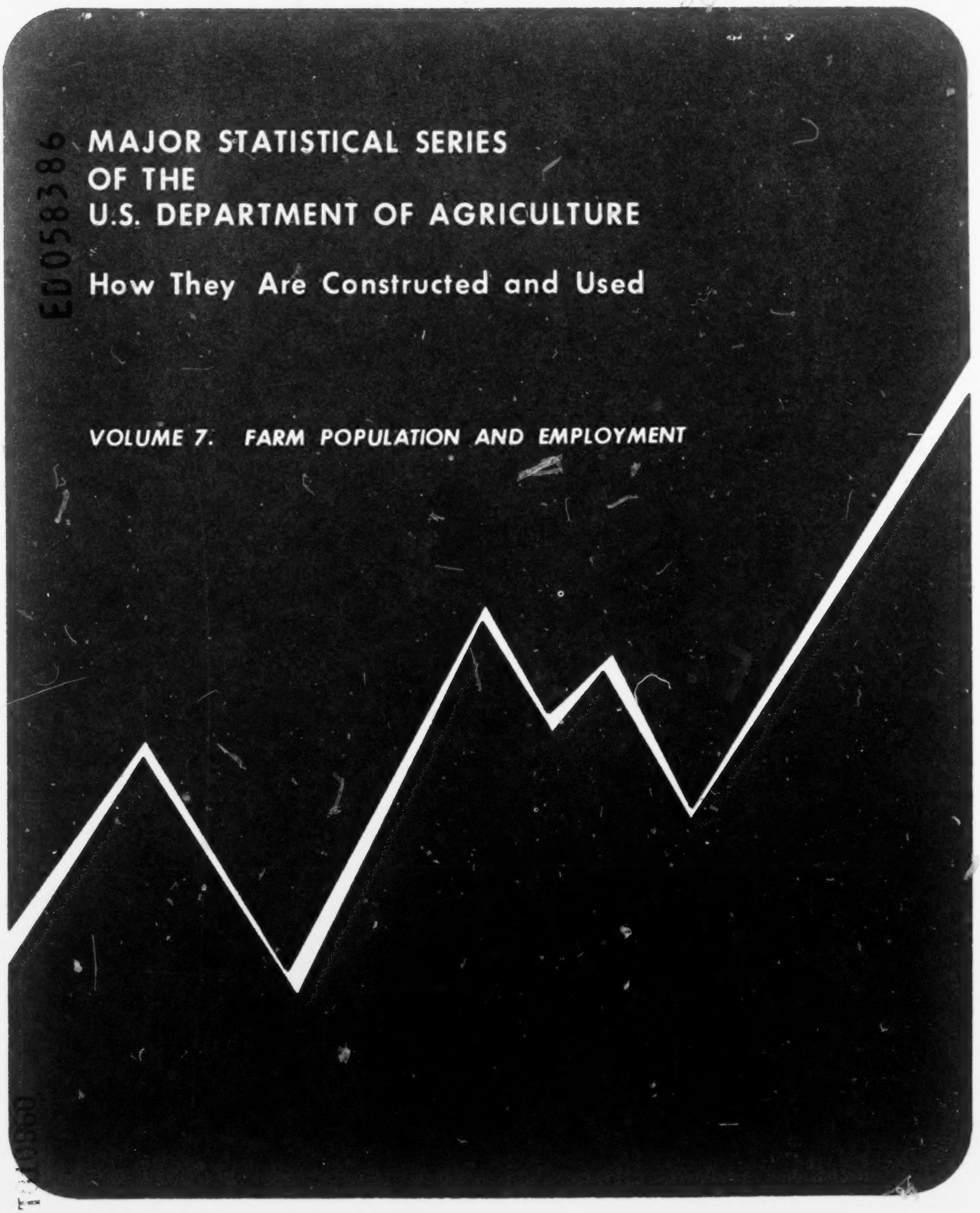
MAJOR STATISTICAL SERIES OF THE U.S. DEPARTMENT OF AGRICULTURE

How They Are Constructed and Used

VOLUME 7. FARM POPULATION AND EMPLOYMENT



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MAJOR STATISTICAL SERIES
OF THE
U.S. DEPARTMENT OF AGRICULTURE

How They Are Constructed and Used

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VOLUME 7. FARM POPULATION AND EMPLOYMENT

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FOREWORD

This series of volumes updates Agriculture Handbook No. 118, *Major Statistical Series of the U.S. Department of Agriculture*, which was published in 10 volumes during 1957–60. The Foreword to that handbook, signed by O. V. Wells, still is an excellent statement to introduce this series:

> We in the United States probably have the best agricultural statistics in the world. Moreover, these statistics are constantly improving; they are becoming more accurate and more comprehensive. Farmers, businessmen, administrators, and legislators have come to rely more and more on statistics—to tell them what's happening, to show where the economic problems are, and to assist in finding answers or serving as guidelines both for current activities and planning ahead.
>
> This is good, of course. Statistics are to be used—not to gather dust on a library shelf. But the user of statistics must always be on guard against misinterpretation. This is increasingly important as our statistical series become more numerous and more detailed. It is not unusual for those on different sides of a transaction or an argument to use the same statistical series. In such cases, a good working knowledge of what the series does or does not measure is essential.
>
> This being true, the careful student always wants to know exactly what any statistic represents. What concepts and definitions are used? How are the data obtained, tabulated, and analyzed? What is known about their accuracy and reliability? How is this particular series related to others?
>
> This handbook is intended to help answer such questions. It is designed to be a ready and useful reference. It describes each of the major statistical series of the United States Department of Agriculture, discusses its uses, and compares it with related series published by USDA or other agencies of the U.S. Government.

Inasmuch as about 10 years have elapsed since publication of Agriculture Handbook No. 118, a Statistical Review Board was established in July 1967, by Secretary's Memorandum No. 1618, to conduct a survey and evaluation of all statistical series issued by the Department of Agriculture in the light of current circumstances. Names of members of the Board are listed inside the front cover of this volume.

One purpose of this review was to assure, insofar as possible, that the needs of the Department and the public for statistical information are met most effectively and efficiently, and that the sources of data and methods used meet the highest standards of accuracy and objectivity consistent with resources available.

Another purpose was the publication of these revised volumes, to describe changes in methods and coverage that have been adopted since Agriculture Handbook No. 118 was issued. Series which were not described in that handbook, but which have increased in importance in the past 10 years, are included in the new edition, as well as series which came into existence during that period. Series which have been discontinued are noted in appropriate volumes.

We hope to keep the handbook up to date by adding new volumes when important new series are published, and by revising individual volumes when major changes are made in concepts or in methods with respect to the particular series covered.

Harry C. Trelogan

HARRY C. TRELOGAN,
Chairman.

M. L. Upchurch

M. L. UPCHURCH,
Vice Chairman.

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NOTE: The farm-operator family level-of-living index, described in Agriculture Handbook 118 (vol. 7, ch. 3), was published by the Department from 1947 to 1967. It has been discontinued for the present, as some of its components have become obsolete over the years. Consideration is being given to development of a new index to be based on up-to-date components, and possibly to represent the whole rural population rather than farm operators only.

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Chapter 1. Farm Population Estimates

By VERA J. BANKS, *Economic Development Division, Economic Research Service*

The series described in this chapter are published in *Farm Population Estimates* (issued annually by ERS), and in *Current Population Reports,* Series Census-ERS P–27 (issued annually by the Bureau of the Census in cooperation with ERS).

The impact of technological and economic progress on agriculture, and the characteristic geographic and occupational mobility of farm people have fostered continuous changes in the size, distribution, and composition of the farm population. Past and prospective trends of a declining farm population have widespread implications for agricultural and other national policies. To measure these trends adequately, it is necessary to maintain up-to-date estimates of the population living on farms, their characteristics, and the volume and direction of migration between farm and nonfarm places of residence.

The Economic Research Service (ERS) prepares estimates on the number of people living on farms and on the components of farm population change—births, deaths, and migration. These are published in *Farm Population Estimates.* Data are given for the United States and the major geographic regions and divisions of the Nation. After each decennial census, when new benchmark data become available, intercensal estimates are prepared and published for States as well as for geographic divisions and regions.

The Census-ERS series presents current estimates of the U.S. farm population by age, sex, color, and labor force status. Both the ERS and the Census-ERS reports contain the same estimate of the U.S. total farm population, but all other data shown in the two series are obtained independently.

USE OF SERIES

In view of the rapidly changing economic and social situation in the Nation, current estimates of the farm population are of prime importance. The collection of these basic statistics is vital to agricultural program reappraisals and the implementation of new activities and programs related to farm people. These series provide data for analyses and appraisals of the composition, distribution, and trends of the farm population. They are used in the computation of annual per capita farm income figures.

These reports are the source of annual data on the characteristics of persons living on farms and on the movement of persons to and from farms. There is widespread interest in the volume of migration from farm to nonfarm areas. It has been especially high with the rise in concern over the extent to which migrants from farms contribute to urban problems.

The annual U.S. total shown in these reports is the official Federal estimate of the size of the farm population. These reports are distributed for informational and research use throughout the United States to government agencies, libraries, universities, research institutions, farm organizations, and the news media.

CONSTRUCTION OF SERIES

ERS Farm Population Estimates

The farm population estimates issued by ERS are based on data derived from four principal sources: (1) Current Population Surveys (CPS) of the Bureau of the Census, from which the estimates of the U.S. total farm population are derived; (2) annual ERS surveys of farm population, from which geographic distribution and components of change of farm population are derived; (3) decennial population censuses; and (4) other related data. ERS estimates of farm population for 1967–68 are shown in table 1.

TABLE 1.—*Farm population and components of farm population change for the United States, regions, and divisions, April 1967–68* [1]

[ERS series]

Area	Farm population, April 1967	Natural increase			Change through migration and reclassification of residence [2]					Farm population, April 1968
		Total	Births	Deaths	Net change	Between farms and nonfarm areas or the Armed Forces			Farm to farm [3]	
						Net	To farms	From farms		
	Thousand	*Thousand*	*Thousand*	*Thousand*	*Thousand*	*Thousand*	*Thousand*	*Thousand*	*Thousand*	*Thousand*
United States	10,875	60	163	−103	−481	−481	268	−749	0	10,454
Regions: [4]										
Northeast	787	4	12	−8	−33	−31	22	−53	−2	758
North Central	4,198	22	62	−40	−172	−176	106	−282	4	4,048
South	4,857	27	72	−46	−222	−216	103	−320	−5	4,662
West	1,033	7	16	−9	−55	−58	36	−93	3	986
Divisions: [4]										
New England	135	0	2	−2	−8	−8	5	−13	([5])	127
Middle Atlantic	652	4	11	−7	−25	−24	17	−41	2	631
East North Central	2,132	10	30	−20	−77	−81	57	−138	4	2,066
West North Central	2,065	12	32	−20	−95	−95	49	−144	([5])	1,983
South Atlantic	2,003	12	31	−19	−75	−76	33	−109	1	1,940
East South Central	1,666	8	24	−16	−76	−73	35	−108	−3	1,599
West South Central	1,188	6	17	−11	−71	−68	35	−103	−3	1,123
Mountain	446	4	8	−4	−25	−25	15	−40	1	425
Pacific	588	3	9	−5	−30	−32	21	−53	2	561

[1] Figures are rounded to the nearest 1,000 without being adjusted to group totals.

[2] Includes persons who have not moved but who were in or out of the farm population because agricultural operations on the places where they were living either ceased or were begun.

[3] Net change in farm population of regions or divisions due to farm-to-farm movement.

[4] Similar estimates for States are not available.

[5] Less than 500 people.

ERS and its predecessor agencies have undertaken an annual survey of the farm population and its components of change since 1923. The survey data for the Annual Farm Population Series are collected by the Statistical Reporting Service for ERS. Questionnaires are mailed to a geographically distributed list of farmers with no nonrespondent followup. Questions asked relate to the number of persons who were living on reporters' farms and neighboring farms at the beginning and end of the specified 12-month period; the births and deaths of farm residents; and the movement of persons to and from farm households. In recent years, these questionnaires have been sent to about 100,000 farmers, with about 30,000 replies. The returned questionnaires have contained reports on an average of four farms each—the reporter's own farm and three adjacent farms.

From these schedules, ratios of each component of population change (births, deaths, and migration) during the specified period to the farm population at the beginning of the period are computed for each State. These ratios are then applied to the previously obtained State estimate for the beginning of the period to obtain estimates of the aggregate changes during the year. These expanded estimates of births, deaths, and movements of persons to and from farms are added to the population at the beginning of the year to obtain preliminary estimates of the farm population at

the end of the year. Since 1944, these preliminary estimates of farm population and its annual change have been adjusted to the U.S. estimate of farm population derived from the CPS and issued in the Census-ERS series.[1]

Although results are compiled by States, postcensal estimates are published only for the United States and geographic regions and divisions, because of the limitations of the sample and the estimating procedures.

Census-ERS Farm Population Estimates

Estimates of the total farm population and its characteristics in the Census-ERS series (tables 2 to 4) are based wholly on the enumerative monthly Current Population Surveys of the Bureau of the Census.[2] The first estimates of farm population by age and sex were developed and issued cooperatively in January 1944. Initially, quarterly data were published, but since 1950 only annual average estimates have been shown. April was selected as the date for the annual series.

TABLE 2.—*Farm population by age and sex, April 1968* [1]

[Census-ERS series]

Age	Total	Male	Female
	Thousand	*Thousand*	*Thousand*
All ages	10,454	5,419	5,035
Under 14 years	2,748	1,419	1,329
14 years and over	7,706	4,000	3,706
14–19 years	1,400	756	644
20–24 years	544	302	242
25–34 years	808	389	419
35–44 years	1,128	545	583
45–54 years	1,393	711	682
55–64 years	1,291	682	609
65 years and over	1,142	615	527

[1] April-centered annual averages.

TABLE 3.—*Farm population by color and sex for broad age groups, April 1968* [1]

[Census-ERS series]

Age and color	Total	Male	Female
	Thousand	*Thousand*	*Thousand*
All ages	10,454	5,419	5,035
White	9,348	4,847	4,501
Nonwhite	1,106	572	534
Under 14 years	2,748	1,419	1,329
White	2,334	1,209	1,125
Nonwhite	414	210	204
14 years and over	7,706	4,000	3,706
White	7,014	3,638	3,376
Nonwhite	692	362	330

[1] April-centered annual averages.

During the 1950's the CPS April estimates of farm population showed somewhat irregular fluctuations, presumably due mainly to sampling variability. At the end of the decade, to obtain an adjusted series with smaller sampling variation, April-centered annual averages were computed and accepted as the official estimates for 1951–59. These were developed by using data for the five quarters centered on the April date for which the estimate was being prepared. For example, for April 1959, quarterly estimates for the months of October 1958 and January, April, July, and October 1959 were used, with a weight of one-eighth each given to the two October estimates and a weight of one-fourth to each of the estimates of the other 3 months. The April-centered annual average procedure has been regularly used since 1960.

REVISIONS PROCEDURE

Ever since the annual estimates of the farm population were started, it has been the practice to revise the last decade's estimates following each decennial census. Somewhat different methods of revising the estimates for areas of the United States have been used at various times. However, all the methods have had the same general basis, using decennial census and CPS data as benchmarks and the ERS surveys and any independent

[1] In earlier years no adjustments were made to the estimates derived from the ratio procedure until new census data became available.

[2] For a description of the concepts and methods used in the CPS see Current Population Reports, Series P–23, No. 22 (*13*). Italic numbers in parentheses refer to the Literature Cited, p. 17.

TABLE 4.—*Employment status of the farm population 14 years old and over by sex and regions, April 1968* [1]

[Census-ERS series]

Labor force status and sex	Total	North and West	South
	Thousand	*Thousand*	*Thousand*
Total	7,706	4,634	3,072
Labor force	4,578	2,885	1,693
Not in labor force	3,129	1,750	1,379
Labor force	4,578	2,885	1,693
Employed	4,505	2,855	1,650
Agriculture	2,610	1,748	862
Nonagricultural industries	1,895	1,107	788
Unemployed	73	30	43
Male	4,000	2,436	1,564
Labor force	3,221	2,024	1,197
Not in labor force	779	411	368
Labor force	3,221	2,024	1,197
Employed	3,190	2,013	1,177
Agriculture	2,130	1,408	722
Nonagricultural industries	1,060	606	454
Unemployed	31	11	20
Female	3,706	2,198	1,508
Labor force	1,356	860	496
Not in labor force	2,350	1,339	1,011
Labor force	1,356	860	496
Employed	1,314	841	473
Agriculture	479	339	140
Nonagricultural industries	835	502	333
Unemployed	42	19	23

[1] April-centered annual averages.

related data as a basis of interpolation between census dates.

Revisions are also necessary when new definitions are adopted. Although it is recognized that there is no exact and definitive way of merging the old and the new series, attempts must be made to provide a continuous annual series and eliminate large breaks in data series produced by definition changes. Detailed statements of the reasons and methods of the revisions following the various Censuses of Population are contained in several reports of this series (*1*, *5*, *9*).

LIMITATIONS

The relative sampling error of the April-centered average U.S. farm population total is about 2 percent. The chances are about 68 out of 100 that an estimate of the total farm population from the sample would differ from a complete enumeration by less than this percentage. The chances are about 95 out of 100 that the difference would be no more than 6 percent and about 99 out of 100 that it would be no more than 7½ percent. As in any survey, the results are also subject to errors of response and nonreporting. Care should be used in interpreting small numbers and small differences.

Farm population estimates for major geographic areas and the components of farm population change, based on mail-questionnaire survey data, are tied to benchmark figures for decennial census years and adjusted to conform to the total farm population estimate obtained annually by the Bureau of the Census. The reliability of these estimates is therefore partly dependent upon the reliability of the U.S. estimate previously discussed, and in addition upon the reliability of the mail-questionnaire survey which is dependent upon the size of the sample and the representativeness of returns from the survey. No measure of sampling variation is available.

In view of the relatively high sampling error associated with national farm population figures, and the even larger degree of approximation inherent in the geographical area figures, and in some of the revision procedures, it is stressed that year-to-year changes in farm population and its components cannot be interpreted literally. Comparisons of single years, or of year-to-year changes, assume a degree of reliability that is not claimed for the data and that is not possible within the limitations of the data sources. When measuring trends—especially those involving the amount and rate of change and migration—persons using the data are urged to use averages of several years.

HISTORICAL DEVELOPMENT

The preparation of current postcensal estimates of the farm population of the United States began in the early 1920's shortly after the introduction of farm residence as a basis for residence classifica-

tion in the 1920 Census of Population (*6*). The first such estimates were issued on an annual basis starting in 1923, based on responses by farmers to mail questionnaires.

In the late 1930's, the Congress passed certain legislation relating to parity income for farmers that required annual farm population estimates back to 1910. Using a 1910 estimate that had been issued earlier, the ERS predecessor agency developed annual estimates for the 1910–20 decade from various data on vital statistics, strength of the Armed Forces, and certain relationships between farm-nonfarm migration and economic series (*2*). Following the issuance of these historical estimates, publications of ERS and its predecessor agencies have shown a continuous series of farm population estimates from 1910 to date.

Estimates of the total farm population and its characteristics have been issued cooperatively with the Bureau of the Census since 1944. At that time a technical committee, representing both the Bureau of the Census and the Department of Agriculture, recommended that a cooperative series of farm population estimates be established (*5*). These estimates were to be based on data from the monthly sample survey of the Bureau of the Census now identified as the CPS.

Accordingly, quarterly estimates of the farm population, with some detail on age, sex, and labor force status, were developed and issued for 1944–49. Annual estimates have been published from 1950 to date.

DEFINITIONS AND EXPLANATIONS

The estimates presented in these reports relate to the rural civilian population living on farms, regardless of occupation. Although the definition of what constitutes the farm population has varied over the years in the censuses and surveys which are basic to the estimates, revisions of data have been made where necessary to provide a continuous series from 1910 to date which may be used for chronological comparisons.

Farm Population, 1960 Definition

In the 1960 Census of Population and the CPS, the farm population consists of all persons living in rural territory on places of 10 or more acres if as much as $50 worth of agricultural products were sold from the place in the reporting year. It also includes those persons living on places of under 10 acres if as much as $250 worth of agricultural products were sold. Persons in institutions, summer camps, motels, and tourist camps, and those living on rented places where no land is used for farming, are classified as nonfarm.

In the CPS, unmarried persons attending college away from home are enumerated as residents of their parents' homes, whereas, in the decennial population census, such persons are enumerated as residents of the communities where they attend college. The effect of this difference is to classify a larger number of college-age persons as farm residents in the CPS than would be so classified under decennial census usage.

Farm Population, Old Definition

Prior to 1960 the farm population included all persons living on farms as determined by the respondent's answer to the question, "Is this house on a farm (or ranch)?" The instructions to the enumerators specified that "Persons on farms who pay cash rent for house and yard only are to be classified as nonfarm." All persons in institutions, summer camps, motels, and tourist camps were classified as nonfarm.

Age

The age classification, for each month used in computing the averages, is based on the age of the person at his last birthday.

Color

The term "color" refers to the division of the population into two groups, white and nonwhite. The nonwhite group includes Negroes, Indians, Japanese, Chinese, and other nonwhite races.

Employment Status

Employed

Employed persons comprise (1) all civilians who, during the specified week, did any work at all as paid employees or in their own business or profession, or on their own farm, or who worked 15 hours or more as unpaid workers on a farm or in a business operated by a member of the family, and (2) all those who were not working but who

had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, or labor-management dispute, or because they were taking time off for personal reasons. Excluded from the employed group are persons whose only activity consisted of work around the house (such as own home housework, painting or repairing own home, etc.) or volunteer work for religious, charitable, and similar organizations.

Unemployed

Unemployed persons are those civilians who had no employment during the survey week, were available for work, and:

1. Had engaged in any specific jobseeking activity within the past 4 weeks. Principal activities include registering at a public or private employment office, meeting with prospective employers, checking with friends or relatives, placing or answering advertisements, writing letters of application, or being on a union or professional register;

2. Were waiting to be called back to a job from which they had been laid off; or

3. Were waiting to report to a new wage or salary job scheduled to start within the following 30 days.

Labor Force

The civilian labor force comprises the total of all civilians classified as employed or unemployed in accordance with the criteria described above. For the purposes of these series, the labor force relates to persons 14 years old and over. However, in most other Government reports the labor force relates to persons 16 years old and over.

Not in Labor Force

All civilians 14 years of age and over who are not classified as employed or unemployed are defined as "not in labor force."

Agriculture

The industry category "agriculture" is somewhat more inclusive than the total of the two major occupation groups, "farmers and farm managers" and "farm laborers and foremen." It also includes (a) persons employed on farms in occupations such as truck driver, mechanic, and bookkeeper, and (b) persons engaged in activities other than strictly farm operation such as cotton ginning, contract farm services, veterinary and breeding services, hatcheries, experimental stations, greenhouses, landscape gardening, tree service, trapping, hunting preserves, and kennels.

Nonagricultural Industries

This category includes all industries not specifically classed under agriculture.

Multiple Jobs

Persons with two or more jobs during the survey week were classified as employed in the industry in which they worked the greatest number of hours during the week. Consequently, some of the persons shown in this report as engaged in nonagricultural activities also engaged in agriculture and vice versa.

PUBLICATION

Farm population estimates for the United States and geographic regions and divisions and estimates of the components of annual change (births, deaths, and migration) are usually issued annually as an ERS report. Historical estimates for 1910 through 1962 are available in ERS–130 (*1*). Annual estimates from 1963 to date are contained in separate reports for each year (*10*).

Cooperative releases of ERS and the Bureau of the Census containing estimates of the U.S. farm population by age, sex, color, labor force status, and other related material are also issued annually (*5*, *7*).

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Chapter 2. Farm Employment, Wage Rates, and Earnings Estimates

By GENE ROWE and CLARA E. MCILWAIN, *Economic Development Division, Economic Research Service**

The series described in this chapter are published in *Farm Labor* (issued monthly by SRS) and *The Hired Farm Working Force of* (*year*) (issued annually by ERS).

GENERAL DESCRIPTION

Two farm employment statistical series are published by the Department of Agriculture:

(1) A monthly series estimating the total number of persons (farm operators and unpaid family members, and hired workers) who do farmwork during the last full week in the month, together with quarterly wage rates for farmwork.

(2) An annual series estimating the number of persons paid to perform farmwork at any time during the calendar year, and their average daily and annual earnings.

The annual series normally shows considerably higher numbers than the monthly series on number of hired workers during the survey week. This follows from the fact that the persons working in one month are not necessarily the same persons as those who worked the previous month. Some rotation in and out occurs, from farm to nonfarm jobs and between employed and not employed. The annual series, by counting all persons who worked at any time during the year, clearly should include a larger number of persons than those working in any one week.

Differences between the two series are shown in detail in table 5.

*Gene Rowe was with SRS when this chapter was written.

TABLE 5.—*Coverage of USDA farm employment series*

Item	Monthly series	Annual series
Name of publication	*Farm Labor.*	*The Hired Farm Working Force.*
Agency publishing	SRS.	ERS.
Frequency of publication	Monthly.	Annually.
Interval reported	Last full week not including last day of calendar month.	1 year.
Population included	Farm operators who worked 1 hour or more and unpaid family members of all ages who worked 15 hours or more. Hired workers of any age who worked for pay.	Persons 14 years old and over who performed farmwork for cash wages at any time during the year.
Respondent	Farm establishment (mail questionnaire).	Individuals (personal interview).
Sample	Nonprobability sample of voluntary reporters.	Probability sample of households.
Area coverage	National; 9 regions; States.	National; 4 regions.
Data reported	Employment: Index, number of persons, hours. Wages: Index, rates by 9 different hiring arrangements.	Employment: Number of persons, number of days. Wages: Total for year, average and median daily.
Definitions	Farm and farmwork as defined by Bureau of the Census.	Same as monthly series.

Historical Background

The Department of Agriculture has published estimates of farm employment on farms of crop reporters since 1919. From 1919 to 1923, however, the employment estimates were quarterly percentages, presenting the supply and demand for farm labor as a percentage of normal. Beginning in 1923, data were collected and published monthly on the number of family workers and hired workers employed on farms. Monthly estimates were revised in 1938 for the period 1910–36 and were revised again in 1948 to conform to the definitions of farmwork adopted in 1948. The estimates are published by USDA's Statistical Reporting Service in *Farm Labor.*

Quarterly wage rates are also published in *Farm Labor.* The farm wage rate series of SRS began in 1866, but until 1908 the surveys were not made regularly. From 1909 to 1923 one survey was made each year, and since 1923 wage rate data have been collected quarterly on January 1, April 1, July 1, and October 1.

In 1945, an annual statistical series was initiated by the Department on the number of workers hired to perform farmwork for cash wages at any time during the year, and their average earnings. This statistical series has been published every year since 1945, except for 1953 and 1955. It is published by USDA's Economic Research Service in *The Hired Farm Working Force.*

MONTHLY FARM EMPLOYMENT AND QUARTERLY WAGE RATES

Annual average estimates of farm employment and wage rates for 1954–68 are shown in table 6. Estimates are published monthly in *Farm Labor.*

Farm Employment

The complete SRS farm employment series gives (1) annual average estimates of total farm employment for 1910 to date, (2) monthly estimates (for one designated week each month) from 1940 to date for the United States and for nine major geographic divisions of the country, and (3) monthly and annual averages by States from 1950 to date. Separate estimates are shown for farm family workers and for hired farmworkers.

The SRS series on number of farmworkers is the only series providing information by States and regions, or showing separate estimates for (a) farm operators and family members working 15 hours or more during the survey week without receiving cash wages, and (b) hired workers (for pay). Related information on number of hours worked during the week is collected. These data provide part of the data on inputs to agricultural production, both in the aggregate and by States or regions, and comprise part of the pattern of employment information. Such data are essential to effective economic analysis of the productive process as well as of the labor force.

Definitions and Concepts

Definitions and concepts of farmwork used historically for the series relate to the number of workers on places considered by the Department as farms. The Department has traditionally tried to follow the definition of farms and farm labor used in the Census of Agriculture. The Census definition of farmwork in 1959, 1964, and 1969 included as farmwork any work, chores, or planning necessary to the agricultural operation of a farm. In 1959 specific instructions were provided Census enumerators indicating activities to be considered farmwork. The activities are listed in the 1959 Census of Agriculture (Vol. II, Gen. Rpt., p. 227), as follows:

> Include as farm labor any work, chores, or planning necessary to the agricultural operations of the place, such as the following:
> Working fields, orchards, or home gardens.
> Feeding and caring for livestock and poultry.
> Irrigating crops.
> Hauling feed, fertilizer, and other supplies to the farm or ranch.
> Cleaning and caring for milk pails and separators.
> Maintaining and repairing machinery and other farm equipment.
> Regular farm help used in constructing or repairing farm building and fences.
> Contract farm work for which labor is hired, but for which machines and equipment are furnished by the farm operator.
> Contract work done by persons supplied by a labor contractor or by cooperative organizations such as a citrus cooperative.
> Planning farm or ranch work.
> Keeping farm or ranch records.
> Supervising hired farm employees.
> Cutting firewood, fenceposts, timber pulpwood, etc., except by persons specifically hired for this purpose.

TABLE 6.—*Farm employment and wage rates: Average number of persons employed, average wage rates by classes, and indexes, United States, 1954–68* [1]

Year	Employment					
	Total employment		Family workers [2]		Hired workers [3]	
	Average number of persons	Index 1910–14=100	Average number of persons	Index 1910–14=100	Average number of persons	Index 1910–14=100
	1,000 persons		*1,000 persons*		*1,000 persons*	
1954	8,651	64	6,570	65	2,081	61
1955	8,381	62	6,345	62	2,036	60
1956	7,853	58	5,900	58	1,953	57
1957	7,600	56	5,660	56	1,940	56
1958	7,503	55	5,521	54	1,982	58
1959	7,342	54	5,390	53	1,952	57
1960	7,057	52	5,172	51	1,885	55
1961	6,919	51	5,029	49	1,890	56
1962	6,700	49	4,873	48	1,827	54
1963	6,518	48	4,738	47	1,780	52
1964	6,110	45	4,506	44	1,604	47
1965	5,610	41	4,128	41	1,482	44
1966	5,214	38	3,854	38	1,360	40
1967	4,903	36	3,650	36	1,253	37
1968	4,746	35	3,532	35	1,213	36

Year	Wage Rates									
	Per month		Per week		Per day			Per hour		Index numbers of composite wage rates 1910–14=100
	With house	With board and room	With board and room	Without board or room	With house	With board and room	Without board or room	With house	Without board or room	
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	
1954	151.00	120.00	29.00	37.50	4.10	5.30	5.30	0.74	0.81	508
1955	154.00	123.00	29.75	38.00	4.20	5.40	5.30	.74	.82	519
1956	161.00	128.00	31.50	39.50	4.45	5.60	5.60	.77	.86	3
1957	168.00	133.00	33.00	41.25	4.60	5.80	5.80	.80	.88	560
1958	176.00	137.00	33.75	42.50	4.80	6.10	6.00	.82	.92	582
1959	186.00	144.00	34.75	44.50	5.10	6.30	6.40	.85	.95	614
1960	192.00	149.00	35.50	45.75	5.30	6.50	6.60	.88	.97	629
1961	195.00	151.00	35.75	46.50	5.30	6.50	6.60	.90	.99	642
1962	200.00	155.00	37.00	47.75	5.60	6.70	6.90	.92	1.01	658
1963	206.00	159.00	37.50	48.50	5.70	6.90	7.10	.94	1.05	677
1964	212.00	162.00	38.50	49.50	5.90	7.10	7.30	.97	1.08	695
1965	223.00	170.00	40.25	51.50	6.20	7.40	7.60	1.03	1.14	732
1966	243.00	185.00	43.50	55.75	6.70	8.00	8.20	1.10	1.23	792
1967	262.00	200.00	47.50	60.50	7.50	8.60	9.00	1.18	1.33	862
1968	283.00	216.00	52.50	66.50	8.20	9.30	9.90	1.28	1.44	931

[1] Average number of persons employed during 1 survey week each month. Survey weeks selected are the latest calendar week that excludes the last day of the month.

[2] Includes farm operators doing 1 or more hours of farm work and members of their families working 15 hours or more during the survey week without cash wages.

[3] Includes all persons doing farmwork during the survey week for pay.

Source: *Farm Labor*, January and March issues.

Do not include:
- Housework.
- Contract or construction work.
- Custom work for which equipment and operating labor are hired such as custom combining, hay baling, etc.
- Repair, installation, or construction work done by persons employed specifically for such work.

Data and Methods Used

Farm employment estimates are based on the following data: (1) Benchmark data from the Census of Population for 1910, 1920, and 1930, from the Census of Agriculture for 1940, 1950, 1954, and 1959, and from nationwide annual sample surveys made by SRS since 1965; (2) estimates of farm employment from nationwide enumerative sample surveys made at intervals during 1945–48, which, together with historical data on the seasonal distribution of man-hour labor requirements in farm production, were used to develop measures of seasonal variation; (3) returns from a monthly mailed questionnaire on employment on farms of crop reporters, available since 1925, which indicate change in average employment per farm; and (4) annual estimates of the number of farms by States and regions, which are used to expand "adjusted" average employment per farm to obtain regional and national estimates of total farm employment and of the family and hired worker components of the total.

The universe is those places defined by the Census of Agriculture as farms in the 48 conterminous States. The sample is a general-purpose nonprobability sample of "general" farms. A mail questionnaire—directed to voluntary reporters and known as the "Farm Report"—is used, primarily for reasons of economy. Each farm operator is requested to report hours worked on the farm; number of unpaid family members and hours worked; and number and hours for farmworkers paid directly by the farm operator. Averages per sample farm are computed and adjusted to a "per all farms" level by multiplying by factors which vary from month to month seasonally, based originally on surveys in the mid-1940's. The adjusted per farm averages are expanded to State totals by multiplying by the number of farms and summing by regions and for the United States. Conventional statistical measures, such as probable error, standard error, and confidence limits, are not available since the source of data is not a probability sample.

Use of the Series

Estimates of farm employment are used for a variety of purposes by Federal and State agencies directly or indirectly concerned with agricultural manpower problems, as well as by farmers' organizations and other private agencies. Within the Department of Agriculture both action and research programs require information on the trend in the size and composition of the farm working force for the United States as a whole, in as much geographic detail as it is possible to supply.

Federal, regional, and State agencies with responsibilities in administering programs of farm labor recruitment and placement utilize these regional and national estimates of farm employment in their program planning and in their evaluation of the effectiveness of existing programs with a view to progressive improvement in the services offered to farmers and farmworkers. Agricultural policy and program development require for many purposes information on the farm manpower situation for use by administrators and by congressional committees and members of Congress. Regional and national estimates of current and historical changes in the size and composition of the farm working force form an integral part in analyses of the current and prospective developments in the farm manpower situation. One important change occurring in agriculture currently is the effect of technological advances, which reduce farm labor requirements and change the types of skills required.

Agricultural economists and rural sociologists in the State agricultural colleges and experiment stations, in the course of their research on many types of agricultural problems, require information on changes in the farm working force and make substantial use of these statistical series. In combination with other relevant data, current and historical estimates of farm employment permit the exploration of the effects of agricultural and nonagricultural conditions on patterns of use of labor in agriculture. Such analyses often permit appraisal of prospective developments that have important current application to the Department's activities in helping farmers to meet manpower problems by adopting laborsaving machinery or other practices.

As farmers become more and more dependent on laborsaving equipment, the need for more localized and more detailed information concerning

numbers of farmworkers by type of farm and type of work, together with their wages and earnings, has become more urgent. Particularly serious problems arose when the legislation (Public Law 78) permitting the employment of Bracero labor expired in December 1964, and a critical labor situation developed in several States. The lack of accurate detailed historical information by localities hampered efforts to determine labor needs objectively and fully. In other situations where labor shortages developed or wage determinations were required—for example, for offshore contracting—the need has been evident for historical data in more detail than has been available for comparison purposes. Changing labor patterns involving farm mechanization have added impetus to the needs for relevant data, both current and historical.

Limitations of Series

As these series show the trend in employment by the farm operator only, they do not in themselves indicate changes in total labor input going into agricultural production. To obtain a measure of total labor input, supplementary information is needed on number and hours worked by all farmworkers, including those performing custom or contract farmwork in the agricultural service category.

Because the estimates of farm employment include both persons who work full time during the survey week and those who work part time, the 12-month average employment shown for each year is not to be interpreted as equal to a corresponding number of man-years of labor used in agriculture. Then, too, there may be some duplication in the count of workers, as those persons working on more than one farm during the survey week, theoretically at least, are counted more than once. Duplication of this type is inevitable in a statistical series on employment, whether agricultural or nonagricultural, based on reports from the employing establishment (e.g., reports from farmers in the case of agriculture).[3] The total level of farm employment shown in these series is probably greater than an unduplicated estimate of full-time equivalent workers in agriculture. This is the case because of the presence of many short-time workers in the farm labor force, the inclusion of still others who work at both farm and nonfarm work during the survey weeks but who are primarily employed in nonagricultural work, and the duplication of those workers who work on more than one farm within the survey week. These statistical and conceptual characteristics of SRS estimates of farm employment need to be kept in mind, particularly with respect to those uses of the data that require an absolute estimate of the number of farmworkers which is unduplicated, or that require a measure of employment on a full-time equivalent basis.

With certain limited resources made available for the purpose, SRS is developing a probability type survey, using a combination of mail, telephone, and personal data collection with the objective of providing more accurate and more detailed data on farm employment than that available from the Farm Report. Four small quarterly surveys were made in fiscal 1969. Future developments depend on availability of resources.

Farm Wage Rates

The source of information in all years has been the Farm Report. The inquiries request reporters to supply "average rates being paid to hired farm labor in your locality." The questions relate to nine different hiring arrangements:

1. Per month with house
2. Per month with board and room
3. Per week with board and room
4. Per week without board or room
5. Per day with house
6. Per day with board and room
7. Per day without board or room
8. Per hour with house
9. Per hour without board or room

A composite or weighted average rate per hour is computed by converting the monthly, weekly, and daily rates to an hourly basis and weighting the rates by approximate distributions of workers hired by the different arrangements. The weights used to compute the composite wage were derived from a quarterly survey of agriculture made in 1948.

The composite wage rate series is subject to a number of objections, namely: (1) Wage rates paid by larger commercial farms are not adequately reflected in the composite rate for some States, especially salaries received by persons such as foremen and earnings of piece rate workers; (2)

[3] This is not the case for data derived from a household survey. For comparisons with such series see the section on "Related Statistical Series" in this report.

because of the underrepresentation of farms producing labor-intensive crops, the series tends to underrepresent labor for the fruit and vegetable crops; (3) the series is not based on specific data on piece rate workers; (4) although the composite rate per hour includes an allowance for piece rate workers on the assumption that they earned the same hourly wage as workers without room and board, the validity of this assumption is open to considerable question.

Uses of Wage Rate Series

One of the major uses of the farm wage rate series is in the Parity Index—i.e., the Index of Prices Paid by Farmers for Commodities and Services, Including Interest, Taxes, and Farm Wage Rates. The inclusion of wage rates in the Parity Index is required by law.[4] Another use is made of it in preparing the cash wage bill series of the Economic Research Service. As farm wage rate data measure one of the costs of running a farm, they are of value to agricultural economists in the analysis of farm business.

The farm wage rate data, however, do not include wage rates for piece rate workers. Survey procedures for this series are not adequate to obtain appropriate payment or earnings data for incorporating earnings or piece rates as an integral part of the wage rate series. The four new surveys made by SRS in fiscal 1969 indicated that piece rate workers account for from a tenth to perhaps a quarter of all farmworkers in the United States, varying from season to season and from State to State, and receive up to 50 percent more on a time basis than other hired farmworkers. This is not to say how their annual earnings compare with those of other hired farmworkers.

Use of these wage rate data, therefore, should be made with full recognition of what the data measure. Wage rates are in terms of payments per unit of time. They are not a measure of earnings, nor do they include Social Security or other types of fringe benefits. Comparisons between rates for farmwork and for industrial work, for example, should be made with caution. Neither set of rates includes certain nonwage items that may add substantially to the real income and incentives of the worker.

[4] Beginning January 1, 1950, the effective date of the Agricultural Acts of 1948 and 1949 (Public Law 897, approved July 3, 1948, and Public Law 439, approved October 31, 1949).

ANNUAL HIRED FARM WORKING FORCE AND EARNINGS

ERS publishes annual estimates of the total number of persons 14 years old and over who did farmwork for cash wages at any time during the calendar year. Also reported are days employed, earnings from farm and nonfarm work, and personal characteristics of hired farmworkers. Estimates are provided for four regions and the United States. These estimates are derived from a survey conducted once a year under contract by the Bureau of the Census for ERS, and published in *The Hired Farm Working Force*. Each annual publication contains statistical data for the preceding year plus a historical table on numbers of farmworkers.

U.S. estimates of numbers of workers and earnings from farm and nonfarm work are shown in table 7.

Each December, ERS sponsors supplementary questions for the CPS questionnaire to be asked of all persons who did paid farmwork at any time during the year. Special questions designed to provide information on current or emerging issues are also added to the questionnaires from time to time, and the results are analyzed and published as special reports. Special information of this type now under consideration for future surveys includes duration of employment and unemployment of farm wageworkers throughout the year, training, and other characteristics of regular hired farmworkers; household relationships, family income and size of households in which there are hired farmworkers, and specified characteristics of the heads of these households; and the number and migratory status of children under 14.

Not included in the annual estimates are persons who died, entered the Armed Forces, or were otherwise removed from the civilian noninstitutional population before the survey. Foreign nationals who did farm wagework and returned home before the survey are not included. The number of foreign nationals admitted for farm wagework has become very small since the termination of the Bracero program, and totaled only 13,323 in 1968.

Use of Series

The agricultural scene is undergoing significant changes—including improved technology (involving increased mechanization, with accompanying

TABLE 7.—*Average days worked and wages earned at farm and nonfarm wagework for all farm wageworkers, by duration, United States, 1959–68*

Year and duration	Number of workers [1]	Farm and nonfarm			Farm			Nonfarm		
		Days worked	Wages earned		Days worked	Wages earned		Days worked	Wages earned	
			Per year	Per day [2]		Per year	Per day [2]		Per year	Per day [2]
1959	*Thousand*	*Number*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Dollars*	*Number*	*Dollars*	*Dollars*
Total workers	3,577	119	814	6.85	88	524	5.95	31	290	9.40
25 days or more	2,166	161	1,038	6.45	138	829	6.00	23	209	9.00
Less than 25 days	1,412	54	471	8.70	12	57	4.90	42	414	9.75
1960										
Total workers	3,693	122	845	6.90	86	537	6.25	36	308	8.50
25 days or more	2,162	167	1,125	6.70	139	879	6.30	28	246	8.65
Less than 25 days	1,531	58	450	7.75	11	55	5.10	47	395	8.40
1961										
Total workers	3,488	108	788	7.30	77	502	6.50	31	286	9.30
25 days or more	1,889	156	1,054	6.75	134	881	6.55	22	173	7.90
Less than 25 days	1,600	51	473	9.20	10	54	5.30	41	419	10.15
1962										
Total workers	3,622	115	896	7.80	81	549	6.80	34	347	10.15
25 days or more	2,067	160	1,164	7.25	134	913	6.80	26	251	9.65
Less than 25 days	1,555	55	540	9.80	10	65	6.45	45	475	10.60
1963										
Total workers	3,597	107	818	7.60	76	483	6.35	31	335	10.75
25 days or more	1,862	158	1,087	6.85	138	883	6.40	20	204	9.90
Less than 25 days	1,735	52	529	10.15	9	54	5.55	42	475	11.20
1964										
Total workers	3,370	118	956	8.05	80	578	7.15	38	378	10.10
25 days or more	2,001	156	1,213	7.75	129	933	7.20	27	280	10.25
Less than 25 days	1,369	62	581	9.35	9	57	5.85	53	524	10.00
1965										
Total workers	3,128	123	1,054	8.55	85	650	7.55	38	404	10.85
25 days or more	1,864	165	1,316	7.95	137	1,045	7.60	28	271	9.65
Less than 25 days	1,264	60	668	10.95	9	66	6.80	51	602	11.75
1966										
Total workers	2,763	128	1,279	10.00	85	731	8.55	43	548	12.85
25 days or more	1,634	171	1,605	9.40	138	1,188	8.60	33	417	12.60
Less than 25 days	1,130	66	807	12.20	9	70	7.45	57	737	13.00
1967										
Total workers	3,078	121	1,295	10.70	84	817	9.70	36	477	13.25
25 days or more	1,740	172	1,761	10.25	142	1,389	9.80	29	371	12.80
Less than 25 days	1,338	54	690	12.75	9	74	8.20	44	615	13.95
1968										
Total workers	2,919	116	1,346	11.60	79	834	10.55	36	512	14.20
25 days or more	1,620	162	1,793	11.05	135	1,434	10.60	27	358	13.25
Less than 25 days	1,299	59	789	13.35	10	85	8.50	48	703	14.65

[1] Numbers of workers are rounded to the nearest 1,000 without being adjusted to group totals.

[2] Average daily wages for calendar year are rounded to the nearest 5 cents.

Source: *The Hired Farm Working Force.*

increased skill levels required in farm and rural nonfarm occupations), rural-urban migration, and related changes in the socioeconomic characteristics of the rural labor force. The hired farm working force series provides the only national primary data available on total annual employment and personal and economic characteristics of hired farmworkers. The demand for these statistics and estimates that can be derived therefrom has intensified in recent years because of increased emphasis on the human input in agriculture. The series is used in making public policy and program decisions, both legislatively and administratively, by the Congress and other Federal agencies—especially the Departments of Labor and of Health, Education, and Welfare. It is also used by various committees appointed by the President, such as the Committee on Rural Poverty and the Food and Fiber Commission.

State agricultural colleges, experiment stations, extension services, and individual research workers make use of the series for teaching and research purposes. Farm and farm-allied organizations, libraries of educational institutions, embassies here and abroad, trade journals, labor union publications, newspapers and other mass media, religious groups, and organizations interested in farm labor are examples of users of the data.

Definitions [5]

Following are some of the key terms used in the survey of the hired farm working force:

Farmwork for cash wages or salary.—This consists of (1) paid work done in connection with the production, preparation for market, or delivery to market of agricultural products; (2) paid work done on and off the farm by a hired farmworker in connection with the normal maintenance and routine farm business, including repairs to farm buildings and machinery, and trips to town to buy farm supplies; and (3) the management of a farm business for cash wages. (For a more detailed explanation see page 8.)

Farmwork for cash wages or salary does not include (1) work done by a farmer on his own farm; (2) "exchange" work done between farmers without pay; (3) work for any "payment in kind," e.g., receiving goods and/or services in lieu of cash wages; (4) work done without pay, or for a token cash allowance, on a family farm by a member of the operator's family; (5) nonfarm work, when performed on a farm by someone other than a hired farmworker involved in routine maintenance chores, and jobs performed on a farm by persons employed specifically for such work (e.g., contract construction, well-digging by a drilling company, hauling of agricultural products to market by a commercial trucker, and domestic service in the farmer's home); or (6) custom work such as spraying, dusting, or combining, when performed by a person who is paid a combined rate for the use of his equipment and labor.

Farm wageworkers.—Persons in the population covered by the survey who did farmwork for cash wages at any time during the year for all or only part of a day.

Casual workers.—Persons who did less than 25 days of farm wagework in a year.

Noncasual workers.—Persons who did 25 days or more of farm wagework during the year. Noncasual workers are further classified into *seasonal workers* (25 to 149 days of farm wagework), *regular workers* (150 to 249 days of farm wagework), and year-round workers (250 or more days of farm wagework).

Days of farm or nonfarm wagework.—Days on which any farm or nonfarm wagework was reported. The work may have been for all or only part of a day.

Earnings from farm or nonfarm work.—Cash wages or salary received from farm or nonfarm work, for the day and for the year. Estimates of earnings do not include the value of fringe benefits received in connection with the wagework.

Migratory status.—Farm wageworkers are classified as *migratory* during the survey year if they leave their homes temporarily (at least overnight) to do farmwork for cash wages in another county within the same State or in another State. Persons who have no usual place of residence and do farmwork during the year in two or more counties are also classified as migratory farm wageworkers.

Persons who do not cross county lines are classified as *nonmigratory* workers, as are those persons who commute daily from their home across county or State lines to do farmwork in another county but return home each night. Also classified as nonmigratory are persons who did farmwork in their own county for part of a year and then made a

[5] Because of the increasing complexity of the changes taking place in agriculture, these definitions are subject to revision.

permanent move to another county, even though they may have done farm wagework in the second county.

The Universe, Sampling, and Weighting

The CPS, from which the hired farm working force series is derived, uses a multistage, probability sample design comprising 863 counties and independent cities with coverage in every State and the District of Columbia (*13*). The sample to be interviewed consists of the usual residents of dwelling units located within the geographic areas chosen for the sample. Since January 1967, some 58,500 dwelling units have been designated for the sample each month. Of these, about 50,000 are occupied by households eligible for interview. The remaining units are not included in the interview program because they are vacant or otherwise not to be enumerated.

The overall sampling ratio used at the present time represents one household in the sample for each 1,170 households in the population. A household generally consists of all persons living together in a dwelling unit.

The estimating procedure used in the CPS involves the inflation of weighted sample results to independent estimates of the civilian noninstitutional population of the United States by basic characteristics of age, color, and sex. The independent estimates are based on statistics from the 1960 Census of Population, including births and deaths, immigration and emigration, and excluding inmates of civilian institutions [6] and the Armed Forces. This procedure provides substantially better estimates than could be produced by assigning the fixed weight derived from the sample ratio to the sample data for each person.

Generally, all of the processing of the data on the hired farm working force contained in the original questionnaire, including editing, coding, and preparation of the final estimates, is completed by the Bureau of the Census. Final tabulations are prepared by the Bureau according to specifications drawn by ERS.

Economists and other social scientists of ERS develop the statistical (series) report and one or more analytical reports utilizing data from each survey. The statistical report, *The Hired Farm Working Force*, contains data on duration of employment at farm and nonfarm wagework and accompanying wages by farmworker characteristics, migratory status, region, and farm-nonfarm residence (*3*). Other reports present analytical results on particular segments or characteristics of the farm wage force, such as economic and social characteristics, education, and skill levels.

[6] Inmates of civilian institutions are persons in group quarters who are under care or custody, e.g., in prisons, reformatories, mental hospitals, homes for the aged, etc.

Reliability of Data

Since the estimates are based on sample data, they may differ from the results that would have been obtained from another sample, or from a complete census using the same questionnaires, instructions, and interviewers. The results are also subject to interviewer and respondent error. The CPS, however, incorporates modern sampling theory which provides methods for measuring the range of errors due to sampling where the probability of selection of each member of the population is known. Methods are also available for measuring the effect of response variability (*13*). A measure of sampling variability indicates the range of difference that may be expected because only a sample of the population is surveyed. A measure of response variability indicates the range of difference that may be expected as a result of compensating types of errors arising from practices of different interviewers and replies of respondents.

Errors from these two sources—sampling and response variability—are estimated jointly from the results of the survey, and the range of error is shown in *The Hired Farm Working Force*. Thus, the user can take this factor into account when he interprets the data.

These computations do not, however, incorporate the effect of response bias, that is, any systematic errors of response such as those that would occur if respondents tended to overstate days worked.

Limitations of Series

There are both statistical and research limitations on the data because of the sample size. Although the survey supplies valuable information on farmworkers for the Nation as a whole, it provides no State breaks and only four regional breaks—Northeast, North Central, South, and West. Neither does it permit adequate detailed analyses of subgroups among small segments of

the farm wage force, such as female heads of households or migrants.

RELATED STATISTICAL SERIES

The Department of Labor issues two statistical series on farm employment: a monthly series on total farm employment (*12*) derived from the CPS and published by the Bureau of Labor Statistics (BLS), and a monthly series on seasonal farm employment (*11*) derived from data sent to the Department from affiliated State agencies and published by the U.S. Training and Employment Service (USTES), Manpower Administration, formerly Bureau of Employment Security.

Even though the SRS and BLS farm employment series are both monthly, the two series have different data sources, concepts, and bases for classification of people by their occupational and industrial attachments. These differences include the following:

(1) The data source for the BLS series is the household; it is the farm establishment for the SRS series.

(2) The BLS series includes workers 16 years of age and over, while there are no age limits attached to the SRS series.

(3) The BLS series classifies a worker engaged in farm and nonfarm activities on the basis of the job in which he spent the most hours during the week. Thus, a farmer or farmworker might be classified as a nonfarm worker if he spent more time in a nonfarm occupation. The SRS monthly series, on the other hand, includes all workers who did any work on a farm irrespective of their other activities.

(4) Because the SRS monthly series obtains its information from farm employers, individuals who meet the minimum activity criterion on more than one farm during the survey week may be counted more than once.

(5) The BLS series refers to the week containing the 12th of the month, whereas the SRS monthly series refers to the last full week in the month.

Essentially, the BLS series represents the number of persons who spent a major portion of their time during the survey week at farmwork, excluding persons below 16 years of age, institutional population, and unpaid members of the farm operator's family who worked less than 15 hours; whereas the SRS series estimates the number of persons performing farmwork during the survey week, excluding only unpaid members of the farm operator's family who worked less than 15 hours.

In 1967, the SRS series annual average was 4,903,000, or 28 percent more than the BLS series annual average of 3,844,000.

Both the ERS annual and the BLS monthly employment series use the Current Population Survey. Conceptually, therefore, these two employment series represent the same universe, the difference being type of worker included and time period to which each series relates. The BLS series is monthly, representing farm operators, unpaid family members, and hired farmworkers 16 years of age and over who performed farmwork during a survey week; while the ERS series represents hired farmworkers 14 years of age and over who performed farmwork for cash wages at any time during the calendar year.

The ERS series is consistently higher by about 1 million workers annually than the BLS series. This is essentially the difference between (1) average employment of those 16 years of age and over as determined by BLS data for monthly surveys, each of which covers a 1-week period related to the longest job held for that week, and (2) the total number of persons 14 years of age and over who did farmwork for cash wages at any time during the year as obtained in the survey of farmworkers for ERS.

The USTES series on seasonal farm employment is based on reports received from each of 261 delineated areas during its agricultural season when 500 or more seasonal hired farmworkers or *any* foreign workers legally admitted to the United States for farmwork are employed. The ERS annual series is national in scope and includes all persons performing seasonal farmwork for cash wages at any time on any number of farms during the year. USTES reports contain estimates of seasonal hired labor in agriculture, by crop activity and origin of worker, for the 15th of each month. Seasonal workers are defined as those workers hired to work on one farm for less than a continuous 150-day period during a year. Thus, the USTES seasonal employment series and the portion of the ERS annual series for seasonal workers are not completely comparable.

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